

# Addressing the Problem of Stagnant Wages<sup>1</sup>

## Introduction

In the three decades after World War II, a central feature of the American economy was a mass upward mobility in which each generation lived better than the last, and workers experienced earnings gains through much of their careers. In short, the American Dream was alive and well. The central drivers of mass upward mobility were real wages for most workers that grew in line with overall labor productivity. Because of rising real wages a 40-year-old male blue-collar worker earned more in the late 1960s than most managers had earned in the late 1940s.

The alignment of wage growth and productivity growth resulted from two main factors: labor markets for most groups of workers in which demand matched supply, and the post-World War II Social Compact that emerged from the Great Depression helped to propagate wage norms throughout the economy, norms that were enforced in part through collective bargaining and professional personnel/human resource management practices.

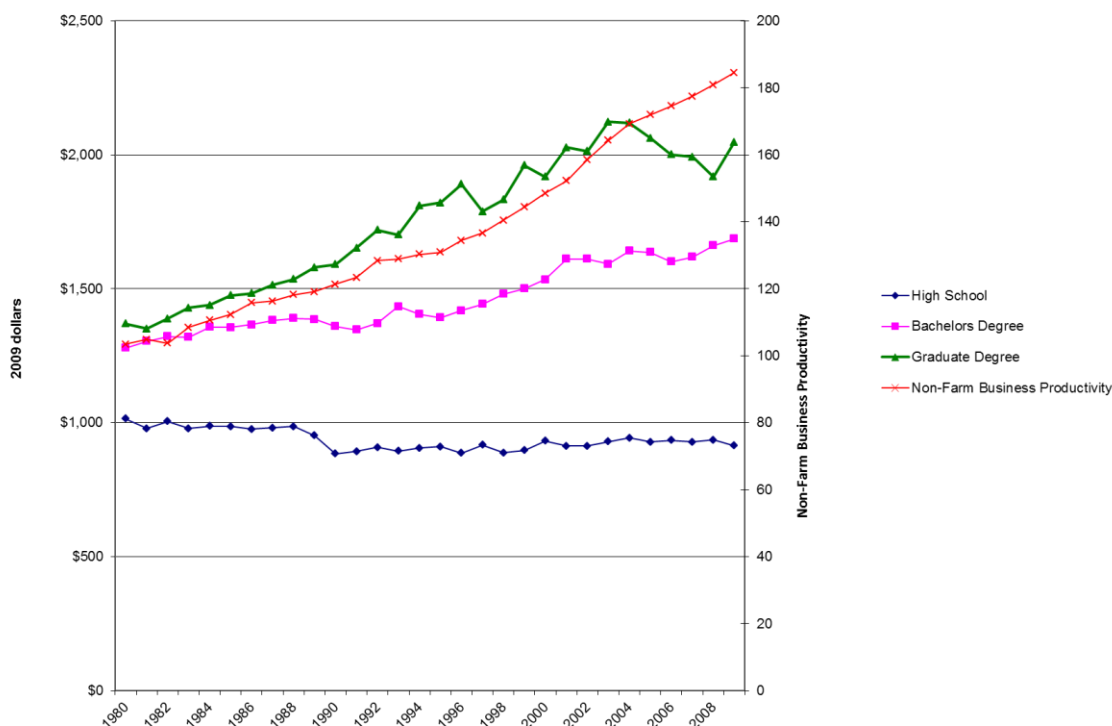
By the 1980s, both of these factors had reversed. Labor demand increasingly shifted toward more educated workers – particularly well-educated women. At the same time, the post-war Social Compact was challenged by the inflationary 1970s and collapsed in the 1980s. Nothing has emerged to replace it.

Now, in the absence of a labor market boom like that of 1996-2000, increased labor productivity no longer translates into rising real wages for many groups of workers. The following figures illustrate this trend by comparing 25 years of labor-productivity growth and median weekly compensation for 35-44 year-old men and women full-time workers classified by education.

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<sup>1</sup> This paper was prepared by Frank Levy and Tom Kochan with contributions from Eileen Appelbaum, Rose Batt, Alan Benson, Joseph Blasi, Jerry Davis, Richard Freeman, Doug Kruse, Ruth Milkman, Daniel J.B. Mitchell, Richard J. Murnane, Paul Osterman, Jeffrey Pfeffer, and Michael Piore.

Figure 1  
Median Weekly Compensation of 35-44 Year Old Men who Work Full Time:  
Non Farm Business Productivity (Right Hand Axis)



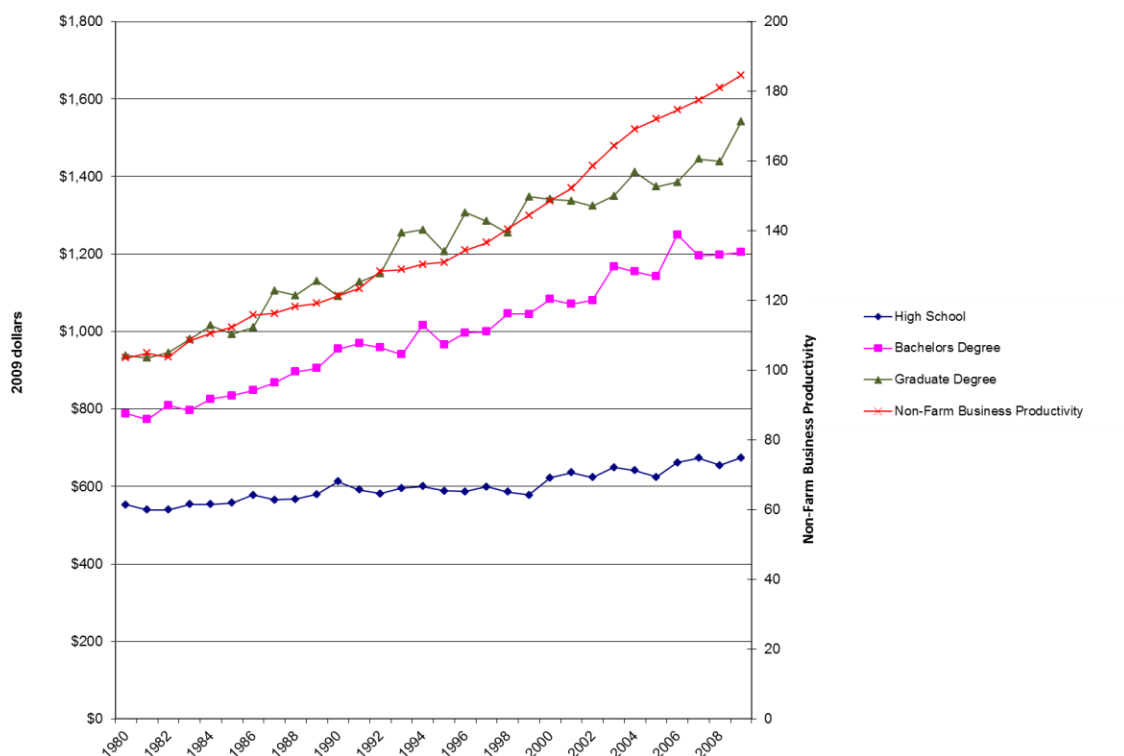
In these figures, *compensation* is defined as median weekly earnings adjusted for fringe benefits and compensation is adjusted for inflation using the GDP deflator.<sup>2</sup>

As shown in the figures, between 1980 and 2009, labor productivity increased by 78 percent but:

- The median compensation of 35 to 44 year-old male high school graduates (with no college) declined by 10 percent.
- The median compensation of 35 to 44 year-old male college graduates (without graduate degrees) grew by 32 percent, less than one half as much as overall productivity growth.
- Only the median compensation of 35 to 44 year-old men with post-graduate training came close to labor productivity growth increasing by 49 percent.

<sup>2</sup> Compensation numbers are deflated by the GDP deflator rather than the Consumer Price Index to eliminate productivity-compensation differences caused by differences between GDP inflation and consumer price inflation.

Figure 2  
Median Weekly Compensation of 35-44 Year Old Woman who Work Full Time:  
Non Farm Business Productivity (Right Hand Axis)



The corresponding data for women are somewhat more positive. The median compensation of women with either a bachelor's degree or post-graduate training has largely kept up with productivity growth. But only one-third of working women in this age group have a bachelor's or higher degree, so the compensation for the other two-thirds of working women generally lags behind productivity growth.

The broken connection between labor productivity growth and compensation growth for average workers has undermined mass upward mobility and the ideal of a growing middle class.<sup>3</sup> The impact has been particularly severe for male and female high school graduates. The stagnant/declining compensation of high school graduates is one potential cause in the high school graduates' falling marriage rates and of the increasing fraction high school-educated mothers who are raising children on their own.<sup>4</sup> Stagnant/declining compensation may also

<sup>3</sup> See, for example, Luce (2010).

<sup>4</sup> On family formation, in 1970, the marriage rate among white men, ages 25-39 was .85 for high school graduates - four points higher than the .81 for men with more than a high school education. By 2008 the marriage rate for

play a role in the very slow increases in the fraction of U.S. high school graduate who complete a bachelor's degree.

***What is needed is a new Social Compact not in the mirror image or with the same institutions of the original Social Compact, but with policies, institutions, and organizational practices suited to the current economy and workforce.***

Two big challenges have to be overcome to put a new Social Compact into place. The first is political and in some respects ideological. Since the 1970s, large corporations have dramatically increased their economic power and political influence (Barley 2010). The results have been substantial legislative changes that deregulated major industries, liberalized banking rules, undercut labor-law enforcement and reform, prevented increases in the federal minimum wage, and fostered an ideology of free-market liberalism and the “maximization of shareholder value” at the expense of other stakeholders.

Prior to these changes, American business practiced a managerial capitalism that shared the returns on investments in new goods and services among the firms’ investors, science and engineering professionals, managers, and other employees. Today, American business emphasizes a form of financial capitalism that rewards financial innovations, transactions, and restructuring. As a result of this shift, a disproportionate share of the gains of recent productivity gains has gone to those in the financial sector who engineered this shift and to the top executives in corporations who applied these principles in their firms.

Over three decades, this evolution has been supported by a public belief in the proposition that left alone, unregulated market forces and corporations that maximize shareholder value would generate the economic growth and shared prosperity needed to raise living standards for all Americans. The 2008 financial collapse disproved this proposition as it involved financial markets. The compensation in Figures 1 and 2 disprove the proposition for most workers. A realignment of corporate and public interests begins with an honest discussion of these facts.

The second problem is analytical. While the past three decades have generated a number of localized organizational and institutional innovations in response to changing markets, technologies, and workforce characteristics — and many of these innovations have

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white male high school graduates was .48, 10 points lower than the .58 for men with more than a high school education. Similarly, in 1970, .91 of children who lived with a high school-educated mother lived with both parents. By 2008, the corresponding proportion had fallen to .70. Among children who lived with a college-educated mother, .91 lived with both parents in 1970 and .89 lived with both parents in 2008. (Autor 2010a, National Marriage Project).

demonstrated their effectiveness on a small scale — few if any have diffused widely enough to be tested for their potential as national strategies.

This policy brief will address both the political and analytical challenges by reviewing the causes of the breakdown in the Social Compact and the evidence on elements that could be part of a new one.

### **Causes of the Breakdown**

Constructing a new Social Compact begins by considering the original Social Compact and why it broke down. The original Social Compact involved a norm for annual wage increases that reflected both the increase in the cost of living and increases in worker productivity. The basic foundation for the compact was laid by the New Deal legislation that established standards for minimum wages, hours of work, and Social Security and that protected worker rights to join a union and gain access to collective bargaining. The War Labor Board that oversaw wages and prices during World War II implemented these basic policies and codified a number of the principles including intra-industry and regional wage comparisons, cost of living adjustments, bargaining over benefits, including health care and pensions, and grievance arbitration (Taylor, 1948).

But it was negotiations following the war between the United Auto Workers and the Big Three automakers in which is sometimes called “The Treaty of Detroit”<sup>5</sup> that codified the productivity and cost-of-living principles in the private sector. The development of pattern bargaining within the unionized sector and personnel practices in large non-union firms that closely monitored and often matched union wages eventually spread the norm through much of the economy.

As new industries, driven largely by advances in information technology, grew rapidly in the 1960s, a similar combination of supply-demand and institutional forces led to the creation of high-quality, good-paying jobs. Bureau of Labor Statistics data indicate that employment in computer machinery doubled from 1960 to 1980. The jobs in most demand required engineering and/or other technical or managerial skills — college-degree jobs that already were in high demand in other industries.

Most of these firms, including startups or very young firms such as Hewlett-Packard and Intel, as well as older firms such as IBM, located production jobs in the U.S. Their desire to remain non-union disciplined their wage and benefit policies to be competitive with union scales and their work practices to be responsive to employee preferences and the needs of

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<sup>5</sup> On the history of the Treaty of Detroit, see Lichtenstein, (1995) and Levy and Temin (2009).

newly emerging work organization, compensation, and production concepts.<sup>6</sup> This produced a virtuous cycle of high productivity-high wage employment practices across a wide spectrum of occupational levels in the most rapidly growing sectors of the economy.

In the decades following World-War II, the federal government took an active role in reinforcing this environment. Despite subsequent periodic debates over their administration, prevailing wage laws including the Walsh-Healey and Davis-Bacon Act set standards for government contractors that reinforced wage standards. Pay for federal workers was tied to comparisons with comparable private-sector jobs, and this norm eventually became institutionalized by Civil Service reform legislation.

Throughout the 1960s and 1970s the federal government continued to play an active role in wage determination, most notably through various iterations of incomes policy from 1962-81, including the "voluntary" wage price guideposts under Presidents Kennedy and Johnson, the controls introduced by President Nixon, and the Pay Board policies of President Carter.<sup>7</sup> While the specific policy goal of these efforts was to restrain inflation, they were all based on the principle that wage increases should in some way be linked to long-run rates of productivity growth. The incomes policy provided not only a framework through which the federal government sought to influence wage determination but also served as a fulcrum for a national debate over appropriate wage norms for average workers and managers as well as higher level professionals and executives.

Over time, employment practices changed in multiple ways that weakened the average worker's bargaining power. By the end of the 1970s, the Social Compact had largely disappeared, replaced by an increasingly fragmented free market in which there was no longer a presumption that wages have an automatic relationship to either inflation or labor productivity growth.

In examining why employment practices changed, we first review the role of technology and trade, then turn to changes in labor market institutions -- most notably the decline in unions, collective bargaining, and minimum wages — and finally address changes in finance, corporate structures, and management practices.

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<sup>6</sup> Mills and Friesen (1996) report that IBM's employment grew from 133,000 in 1963, the year the IBM 360 computer was introduced, to a peak of 415,00 in 1985. See Foulkes (1980) for a discussion of the personnel practices of other large non-union companies over the 1960 to 1980 time period.

<sup>7</sup> For a historical timeline on wage-price policies see [http://www.google.com/search?q=wage+price+guidelines&ie=utf-8&oe=utf-8&aq=t&rls=org.mozilla:en-US:official&client=firefox-a#q=wage+price+guidelines&hl=en&client=firefox-a&sa=X&rls=org.mozilla:en-US:official&}](http://www.google.com/search?q=wage+price+guidelines&ie=utf-8&oe=utf-8&aq=t&rls=org.mozilla:en-US:official&client=firefox-a#q=wage+price+guidelines&hl=en&client=firefox-a&sa=X&rls=org.mozilla:en-US:official&)

## Technology

Underlying the original Social Compact were markets for blue-collar and white-collar workers in which demand roughly equaled supply. In the subsequent free-market environment, the very weak wage growth of high school graduates reflects, in part, declining demand for their labor due to the diffusion of computerized work. The largest substitutions of computers for human skills have occurred in jobs that repetitively process information using standard operating procedures — “rules” — including many production and clerical jobs. These jobs lie in the lower middle of the earnings distribution and are often held by high school graduates or persons with some college.<sup>8</sup> As these jobs disappear and “hollow out” the earnings distribution, persons who would have held the lost jobs are forced to compete for service jobs that typically pay lower wages.

## Globalization and International Trade

The original Social Compact flourished when oligopolistic U.S. industries faced little foreign competition. By the 1960s, foreign competition was growing first from high-wage countries, e.g., Germany, Japan and, then, increasingly from low-wage countries, most notably China. While studies in the 1990s showed little impact of trade on wages,<sup>9</sup> more-recent studies document how trade, particularly with China, is resulting in the loss of manufacturing production jobs. An example is the recent work of Autor, Dorn and Hanson (February 2011) in which the authors estimate that increased exposure to China trade (due to China's rising productivity and falling trade barriers) explains 19 percent of the decline in U.S. manufacturing employment between 1991 and 2000 and 32 percent between 2000 and 2007.

The advance of telecommunications has allowed the offshoring of many service jobs, most of them in call centers and other mid-skill service-center work. Note that computers and trade/offshoring are affecting many of the same jobs.<sup>10</sup> The increased ability to offshore production or service jobs has a two-pronged effect on wages: some high-wage jobs are lost to low-wage countries, and the threat of offshoring holds wages down for jobs at risk of moving.

Beyond individual impacts, it is important to consider the trade imbalance from a macroeconomic perspective. The trade imbalance has been a serious problem since the 1980s

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<sup>8</sup> See Autor, Levy and Murnane (2003), Levy and Murnane (2005) and Autor (2010b) for further discussion.

<sup>9</sup> E.g. Lawrence and Slaughter (1993)

<sup>10</sup> This is no accident. The same “step-by-step” procedures that make a job easy to computerize make it easy to explain to someone 6,000 miles away. For example, call center work can be sent to India using heavily scripted interactions (step-by-step procedures), or it can be computerized using speech recognition software. See Levy and Murnane (2004) for further discussion.

when the focus was Japanese rather than Chinese imports.<sup>11</sup> At the peak of the most recent business cycle, i.e., before the Great Recession, the imbalance came to 5 percent to 6 percent of American GDP. The Great Recession reduced the imbalance by roughly half because of its impact on consumption. As demand fell, so – too – did the American appetite for imported cars, flat screen TVs, and other consumer items. As the economy sluggishly improves, the imbalance can be expected to widen.

The trade imbalance represents a “leakage” of demand-increasing policies – ranging from very low interest rates to “cash for clunkers” – from the U.S. abroad. It also represents a vast pile-up of American debt to foreign holders – including central banks – that is ultimately unsustainable. What the financial implications of a run on the dollar might be are no more predictable than were the implications of the unsustainable build-up of mortgage-related securities during the early 2000s.

The displacement effect of trade imbalance (diminished exports; heightened imports) falls heavily on the U.S. manufacturing sector – once a source of good jobs at decent wages. There is a notion prevalent in some circles that all manufacturing must inevitably go to China or India or somewhere else and that the U.S. will then pay for imports of such products through exports of an ill-defined set of “services.” But there is no way that the U.S. is going to produce enough blockbuster movie royalties and the like to finance such a shift.

Eventually, the trade imbalance must correct and, indeed, reverse — to begin paying off the foreign debt — and manufacturing must come back. It may be a different form of manufacturing with different technology than existed in the period after World War II. But the reversal must come. In that regard, the U.S. is no different than a household. To pay off debt, a household must earn more than it spends. The rule is the same in international commerce. To avoid serious financial problems, the nation needs policies reverse the current imbalance in as orderly a transition as is possible.

### **Declining Unionization and Effects of Collective Bargaining**

As late as the early 1970s, unions were still a powerful force in U.S. labor markets. Among private sector workers, 34 percent of men and 16 percent of women were union members. Today, those percentages stand at 10 percent and 6 percent, respectively. The decline had multiple causes: an eroding manufacturing base where unions had been strong; a failure of unions to actively organize growing industries; a federal government that tacitly approved business efforts to make organizing more difficult, and repeated failures (1978-79,

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<sup>11</sup> See White (1985).



1992-95, and 2008-10) to break a political stalemate over how, if at all, to reform and modernize labor law.

The decline of unions has undercut workers' wages through multiple channels. Researchers have pointed to the way in which unions propagated wage norms through much of the economy and acted as a pro-worker pressure group in the formation of federal and state policy.<sup>12</sup> With few prospects for organizing new workers or industries, the bargaining power and innovative capacity of collective bargaining both declined. By the mid 1980s, traditional arms-length union management relations no longer were able to generate the productivity needed to compete on the basis of high wages.

As union coverage declined, so too did unions' ability to rely on strike threats as a source of bargaining power and to use pattern bargaining to spread wage increases beyond their specific bargaining units. Indeed, the early 1980s saw the beginning of an era of "concession bargaining" in which strikes were associated with wage declines instead of wage increases.<sup>13</sup> Innovative labor-management relationships that were competitive with the best of non-union models emerged in a number of industries but without labor-law reforms needed to support and endorse these innovations, the innovations failed to diffuse broadly enough to become the new norm.<sup>14</sup> The result was a downward spiral: It was easier for firms to avoid unions than to work with them to transform relationships and work practices. The threat effects of unions on new operations evaporated, and the pressure to match union wages and benefits slowly but steadily eroded. Collective bargaining has never recovered its pre-1980s momentum.

### **Declining Value of the Minimum Wage**

When set at an appropriate level, the minimum wage serves as a norm for all wages in the lower-paid sectors of the economy. The value of the minimum wage currently stands at \$7.25 per hour and, roughly speaking, this value has not increased for 30 years.

From the end of World War II through the end of the 1960s, the value of the minimum wage rose steadily from \$3.40 in 1947 to \$8.71 in 1968 and \$8.26 in 1969 (all figures in 2009 dollars). Since that time, the minimum wage's value has been steadily eroded by inflation, only partially offset by infrequent Congressional increases. By 2006, the value of the minimum wage

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<sup>12</sup> On the propagation of wage norms, see Western and Rosenfeld (October 2010). On the role of unions in shaping pro-worker national policy, see Hacker and Pierson (2010).

<sup>13</sup> See Kochan, Katz, and McKersie, 1986; Mitchell, 1985.

<sup>14</sup> Kochan, Katz, and McKersie, 1986; Black and Lynch, 2001; Appelbaum, Gittel, and Leana, 2008.

had fallen to \$5.62 before a three-step Congressional increase raised the wage to its current value of \$7.25.

The Employment Policy Institute estimates that raising the minimum wage from \$5.62 to \$7.25 affected 2.3 million families. Beyond this, failure to keep the minimum wage growing at an appropriate rate undermines wages at higher levels. A recent review of wage-inequality studies (Lemieux, 2008) concluded:

“Another important wage-setting institution is the minimum wage, which fell sharply (in real terms) during the 1980s. DiNardo et al. (1996) show that the decline in the real value of the minimum wage had a very large impact on wage inequality among women, and a smaller but still substantial impact among men. This finding was later confirmed by Lee (1999) who concludes that all of the increase in inequality in the lower end of the wage distribution during the 1980s was due to the decline in the real value of the minimum wage ...”

## **The Financialization of the Economy**

Beyond changes in technology, product markets, and labor-market institutions, changes in financial institutions have helped to create wage stagnation and wage inequality. Four parallel trends are notable: A heightened focus on shareholder value, an increased use of debt financing, the deregulation of financial markets, and the expansion of the financial-services sector.<sup>15</sup>

### Shift to Shareholder Value

Under the forms of managerial capitalism that emerged out of the New Deal and were sustained in the Social Compact decades following WWII, corporations made money through investments in productive enterprises and the creation and realization of value through the management of labor, even in the context of increasingly global markets. Shareholder claims were important but not the only consideration in corporate decision-making. Corporate labor-relations negotiators and managers had considerable discretion to negotiate wages and benefits and create incentives for a productive workforce — necessary for long-term growth and profitability.

Today, an increasing proportion of the economy is organized around financial capitalism — where productive enterprises are viewed as bundles of assets to be reconfigured with the goal of maximizing financial returns. The focus of investment activities has shifted — from investing in productive, value-added enterprises to extracting money from companies for re-investment in higher-yielding activities.

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<sup>15</sup> See Batt and Appelbaum (2010) for a fuller discussion.

As part of this new financial business model, power within corporations has shifted from labor relations and human resource executives to finance and other top executives who serve as agents of increasingly demanding financial markets.<sup>16</sup> Executives' stated goal of maximizing shareholder value shifts the distribution of corporate profits from wage earners to shareholders. One way this goal is achieved is by lowering labor costs, which often translates into downward pressure on wages or wage stagnation at the bottom of the income distribution.

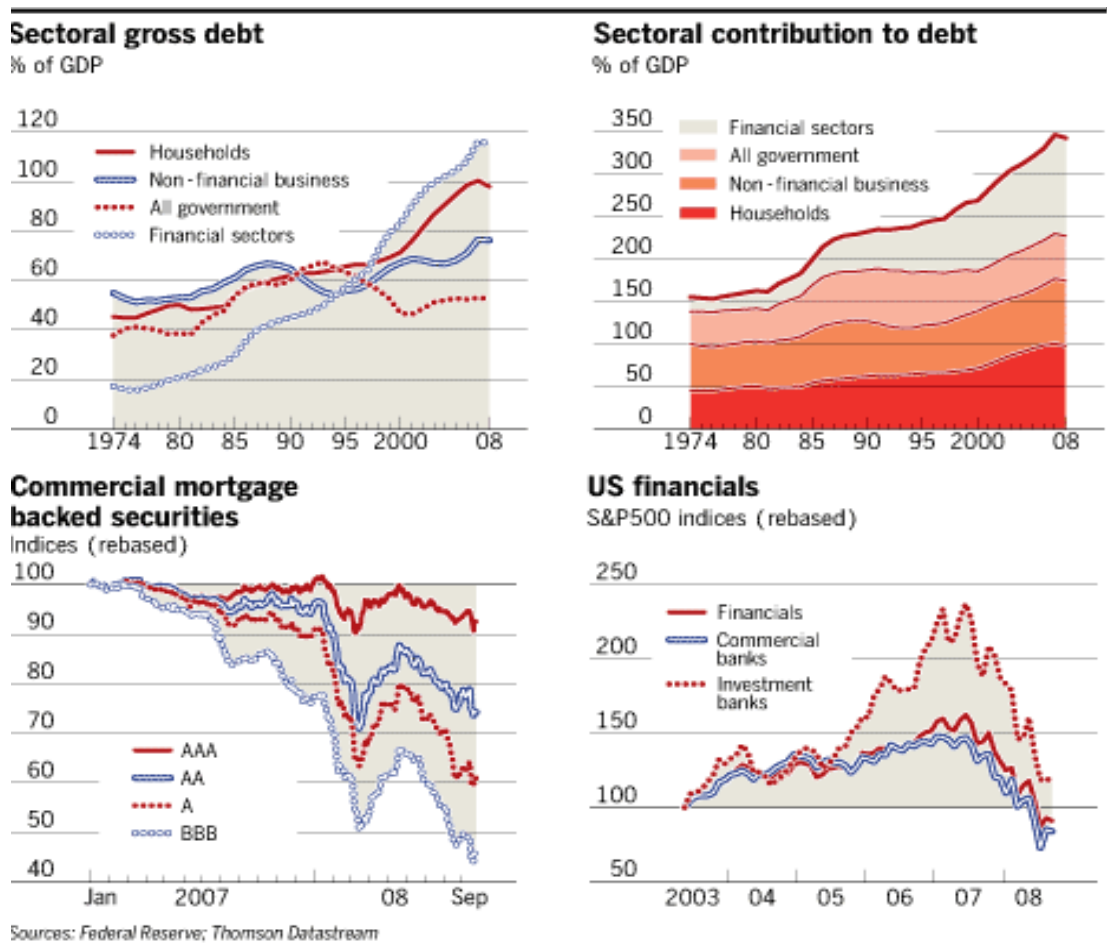
### Reliance on Debt

The success of the new financial business model also has depended on greater use of debt financing among both financial and non-financial corporations (See Figure 3, sectoral gross debt, 1974-2008.). According to agency theory, debt limits managers' discretion and requires them to prioritize shareholder interests (Jensen 1986). Debt financing grew in the 1980s with the emergence of high-yield, so-called "junk" bonds that could be used to finance hostile corporate takeovers. Investors could band together to take over poorly performing companies and effectively discipline managers — creating a "market for corporate control" (Lazonick 1992). Corporate raiders could profit by buying conglomerates and selling their parts off to competitors, which they did on a large scale (Davis, 2009). These activities became possible as of 1982, due to Justice Department rules that facilitated intra-industry mergers and a Supreme Court decision that struck down state anti-takeover laws.

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<sup>16</sup> Jacoby (2005) documented the significant differences in salaries of top financial- and human-resource executives in the U.S. in contrast to their relatively equal value in Japan.

## Growth of U.S. Debt 1974-2008



In addition, new institutional investors — mutual funds, trusts, insurance companies, and pension funds — began holding a larger share of corporate debt.<sup>17</sup> Because they are highly diversified (rarely holding more than 1 percent of a company), they are known to cause companies to pursue risky strategies (such as heavier debt) for higher returns. Higher debt interferes with cyclical-risk insurance for employees, e.g., via wage smoothing and job guarantees, and can endanger a firm when markets turn down. Institutional owners also press firms for a larger share of corporate resources, and, as a result, institutional activism statistically is associated with asset divestitures and with layoffs (Jacoby 2009). Laid-off workers suffer large and persistent reductions in earnings lasting up to 20 years or more, not only for those laid-off in recessions but also for those displaced during better economic periods (von Wachter, Song, and Manchester 2007).

<sup>17</sup> U.S. institutional investors in 1960 owned 12 percent of U.S. equities; by 1990 they owned 45 percent and the share rose to 61 percent in 2005. Institutions today own 68 percent of the 1,000 largest U.S. public corporations (Jacoby 2009).

## Deregulation of Financial Markets

Deregulation of financial markets has helped create the institutional framework to support the new financial business model. Large institutional investors emerged as the result of a pension reform bill (ERISA, 1974, 1978) that allowed pension funds and insurance companies to hold shares of stock and risky bonds in their portfolios. Saving and loan banks (S&Ls) were allowed to hold junk bonds and invest in risky activities under the Garn-St. Germain Act of 1982. Reagan-era tax-law changes provided incentives for debt-financing over the use of retained earnings for investment, leading many to use retained earnings for stock buybacks to inflate the value of stocks and reward shareholders (Lazonick 2009; Sum and McLaughlin, 2010).

A series of banking-law reforms — culminating in the 1999 Gramm-Leach-Bliley Act (GLBA) — repealed the Glass-Steagall Act of 1933, thereby allowing all types of banks and insurance companies to consolidate into financial institutions with concentrated pools of capital. Investment banks were allowed to hold less capital in reserve, thereby facilitating greater use of leverage in trading activities (Lowenstein 2004, Sherman 2009). New financial instruments (such as credit-default swaps) and financial actors (hedge funds and private-equity funds) emerged and were explicitly exempted from regulation under the 2000 Commodity Futures Modernization Act.

As a result of these changes, one-third of the Fortune 500 were acquired or merged between 1980 and 2000. In almost every industry, the remaining firms restructured to focus on “core competencies” offering higher value-added for shareholders. They outsourced lower value-added activities to lower-cost U.S. subcontractors or overseas suppliers. In autos, for example, G.M. spun off its parts supplier into a separate entity, Delphi; and Ford did the same by creating Visteon. This process turned the largest employers into smaller ones — especially manufacturers that previously provided stable jobs with high wages and opportunities for mobility (Davis, 2009) — and created second- and third-tier jobs offering lower wages and benefits in supplier firms. These strategies were possible, in part, because of declining union power and a growing excess supply of blue-collar labor.

## Growth of Financial Services

These changes also have led to dramatic growth in the size and income of the financial-services industry. Between 1947 and 2005, finance and insurance grew from 2.32 percent of U.S. GDP and 2.76 percent of employee compensation to 7.69 percent and 7.65 percent, respectively.<sup>18</sup> Their 2005 share of employment was 4.4 percent; and much of the growth of

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<sup>18</sup> See Philippon (2007). In National Income and Product Accounts, there is no independent output measure for the finance and insurance industries. The industry’s share of GDP is largely determined by its compensation, which is predicated on the theory that an employee’s compensation represents his or her marginal product.

total compensation reflected growth in compensation per employee, particularly since the early 1980s. The share of corporate profits captured by the sector also grew from 25.7 percent to 43 percent between 1973 and 2005 (Palley 2007:36).<sup>19</sup>

While it is impossible to assign a causal weight to the effects of the growth in the financial sector on wage determination or the distribution of income, clearly a disproportionate part of the productivity gains in the last 30 years has gone to the top 1 percent or less of the distribution, and this top 1 percent includes a disproportionate share of persons employed in the financial sector (Blair, 2010).

Dew-Becker Gordon estimates that 45 percent of the real-income gains went to the top 10 percent of wage and salary earners during 1966-2001, compared to 27 percent in 1966. Half of that increase went to the top 0.01 percent. The most recent data from Piketty and Saez find similar patterns and estimate that the income share of the top 1 percent of households stood at 10.2 percent in 1980 and 14.4 percent in 1990; 21.5 percent in 2000 and 21 percent in 2008.<sup>20</sup> This inequality has come under greater scrutiny since the financial collapse and the Great Recession.

The financial industries' large profits and salaries corresponded with an increase in the industry's influence on Congressional policy (Barley, 2010).<sup>21</sup> During the original Social Compact, such high salaries might have been criticized by an activist president and been constrained by the realization that similar demands would be put on union bargaining tables. In the 1980s, high compensation for bond traders and investment bankers and the dominant rhetoric that short-term alignment of executive and shareholder interests should dominate over all other considerations legitimized the growing gap between the compensation of corporate CEOs and average workers.

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<sup>19</sup> Davis (2009). From a shareholder's perspective, incentives should reward executives for share performance above average share performance in the industry. In practice, executives were often rewarded for all share-price increases even if competitors' shares increased faster.

<sup>20</sup> Data downloaded from Emmanuel Saez website: <http://www.econ.berkeley.edu/~saez/>. These data are updated from Piketty and Saez (2003). The numbers in question come from Table A3 and represent income including capital gains.

<sup>21</sup> An example is Senator Charles Schumer, former chair of the Democratic Senatorial Campaign Committee, who speaks out often on income inequality but was unwilling to deal with the "carried interest" provisions that allowed hedge fund and private equity managers' incomes to be taxed as capital gains, at particularly low rates. Hedge funds and private equity have been significant contributors to the Democratic Party. See Levy and Temin (2009) for additional examples.

## **The “Fissuration” of the Labor Market**

The original Social Compact emerged and was reinforced in large vertically integrated firms that internalized a wide array of occupations and functions. Large firms in both older industries, such as autos, and newer industries, such as computers, employed production workers, accountants, and janitors and covered them with internally coherent wage structures as well as human resource policies and practices.

Today’s employment and wage structures are far more fragmented. Consider this example proposed by David Weil (2010):

A maid works in a hotel owned by a Real Estate Investment Trust that is her employer of record. She is evaluated and supervised on a daily basis and her hours and payroll managed by staff of a national third-party hotel management company but follows daily procedures regarding cleaning, room set-up, overall pace, and quality standards established by the international hotel chain whose name the property bears.

As Weil notes, this fragmentation has occurred in part as a way for corporations to cut costs — for example, to avoid paying benefits for classes of workers — and in part as a way for a corporation to specialize in its “core competencies.” The result is a diffuse wage-setting process that makes it much more difficult to both enforce wage norms and to assign accountability for violations of labor standards.

## **Imprinting Effects of the Great Recession**

The trends we have described were all at work well before the Great Recession that began in 2008. The effects of the sudden, steep rise in blue-collar and white-collar layoffs and the very slow recovery further undermine most workers’ bargaining positions. Recent evidence documents long term, perhaps lifetime imprinting effects on earnings and job opportunities of young workers seeking their first career jobs during a recession.<sup>22</sup> The cumulative effects of the 30-year breakdown in the Social Contract are also clear: a majority of today’s labor market entrants begin their career at lower real wages and face the prospect of a flatter age-earnings trajectory than cohorts who began their careers in the late 1970s.<sup>23</sup> The final blow to young workers is the bleak job prospects for large numbers of college graduates. One estimate suggests that half of college graduates with BA degrees are working in jobs that do not require

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<sup>22</sup> See, for example, Oreopoulos, von Wachter and Heisz (under revision).

<sup>23</sup> Bernhardt et al., 2001.

a college education.<sup>24</sup> Whether this form of underemployment is temporary or has long-term imprinting effects on wages of college graduates remains to be seen.

### **Potential Solutions**

The broken link between productivity and wage growth reflects changes in markets, policies, and their enforcement, institutions, and organizational norms and practices that have been evolving for a long time (circa 1980). Given this history, it is clear that the solutions will also need to be multiple and systemic and sustained for a long time. They also will need to match the features of the contemporary economy. The prior Social Compact was well-suited to a production-based economy in which wage increases in manufacturing set the norm for other parts of the economy.

Today, manufacturing can no longer play this catalytic role. Instead, norms and institutions need to support an innovation-knowledge based economy. We outline below a potential combination of actions suited to this task. If the list seems formidable, recall that we are now facing a situation where the economy has stopped working for something between one-half and two-thirds of all American workers.

### **Education and Training as Necessary — Not Sufficient — Conditions**

The original Social Compact rested on a labor market with strong demand for blue-collar labor. An innovation economy generates strong demand for more highly educated workers. Since the early 1980s, growing demand for more educated workers — particularly college graduates — has outstripped increases in supply. The resulting imbalance has caused downward pressure on the wages of high school graduates and is a central cause of the widening high school-college compensation gap shown in Figures 1 and 2. It follows that one element of a new Social Compact involves increasing the supply of more educated workers — both the number of adults who have access to additional training throughout their careers and the fraction of high school graduates obtaining high quality post-secondary education and training.

Increasing the availability of continuing or so called “lifelong” learning and education opportunities requires overcoming a well-known market failure problem. Individual firms are reluctant to invest in training opportunities that enhance workers’ general skills or labor market mobility for fear that trained workers will quickly be “poached” by other firms that haven’t had to pay training costs. Overcoming these market failures requires coordination that could come from either government and/or private multi-party institutions. Union-sponsored apprenticeship and training programs traditionally served this purpose. Some professional

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<sup>24</sup> Sum and McLaughlin , 2010.



associations offer continuing-education programs and indeed some require continuing education to retain professional accreditation.

Wherever appropriate these institutional sources of adult or lifelong learning should be encouraged and expanded. Community colleges can, and in some cases do, play a vital role in delivering needed education and training. Government could also play a more active role by bringing industry, professional, and labor leaders together at sectoral levels to encourage and support investments in training and development. Indeed, in the sections below we will suggest a number of important labor-market innovations needed to support an innovation- and knowledge-driven economy that call for more active sector-specific initiatives.

Increasing the number of college graduates requires dealing with two potentially related obstacles. One is the stagnation since the early 1970s in the high school graduation rate at approximately 75 percent.<sup>25</sup> The failure to increase the high school graduation rate explains about one-half of the slowdown since the 1970s in the growth in the rate of college completion (Bailey and Dynarski, forthcoming). The other is the weak ability of high school graduates, once in junior college or college, to complete a degree. The historically large college-high school earnings gap has caused a growing fraction of high school graduates to *start* higher education, but the fraction who complete a bachelor's degree has increased only modestly for women over the last twenty years and has remained basically flat for men.<sup>26</sup>

The Obama Administration has given high priority to incentivizing and funding educational reforms through “race to the top” and related school-improvement grants. This has stimulated an enormous amount of reform activity across the country, including dramatic growth in the number of charter schools. At this point, however, several questions remain unanswered.

- First, will competitive pressures drive out of existence ineffective charter schools?
- Second, will it be possible to replicate on a large scale the successes of effective charter schools?
- Third, will competition from charter schools result in significant improvements in the performances of public schools, especially those in urban areas?
- Finally, will education reform and efforts to control state and local government budgets move forward in a collaborative fashion by engaging teachers and unions in the process,

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<sup>25</sup> See Heckman and LaFontaine (2010). This calculation treats GED recipients as high school dropouts.

<sup>26</sup> See Autor, 2010a. Note that the slow growth of the fraction of young men with college diplomas is true in many OECD countries.

or will it be a forced restructuring accompanied by labor conflict, large-scale layoffs, reductions in teacher wages and benefits?

How the nation moves the education reform agenda may very well determine whether or not lasting and widespread improvements in educational attainment are realized. Efforts to engage teachers and unions in creating the equivalent of private-sector high-performance or knowledge-based organizations (See discussion below.) and labor-management partnerships need to be elevated higher on the policy agenda at both the federal and state levels. Information on a number of models of successful joint labor-management reforms are available (Rubinstein, 2010). The Department of Education is taking a small step in this direction by encouraging school board officials, superintendents, and union leaders to work with the Federal Mediation and Conciliation Service in negotiating and managing school reform.

One policy area in which there is a striking degree of consensus is the importance of high quality pre-school education. The evidence is increasingly strong that preparing all children to thrive in school is much more cost-effective than remediation policies to help children who fall behind. The growth of universal pre-K programs is a promising move toward this policy goal. However, in many states, the initiatives are underfunded, leaving many children without access to pre-K programs and many others funded by programs of inadequate quality.

### **Investing in Jobs/Industries of the Future**

A companion Employment Policy Research Network paper reviews the causes and consequences of the deep and persistent rise in unemployment and the prospects for replacing the jobs lost in the Great Recession. The bottom line of that analysis is that absent stronger and more direct job creation efforts, the economy is not likely to replace the jobs lost plus those needed to account for population growth anytime in the foreseeable future. A significant jobs' deficit could be a feature of the economy for most of this decade.

Our focus here extends the proposals for job creation included in the companion paper to focus on the quality of the jobs needed to reverse the decline in American living standards. We consider both jobs created through new entrepreneurial activities and organizations and expansion in existing enterprises.

Recall that it was the invention of new financial instruments that were encouraged by a shift in government policies favorable to that sector that jumpstarted the era of growth via financial capitalism. The current challenge lies in creating an environment and set of incentives sufficient to foster invention, entrepreneurship, and creation of high-quality jobs that include both design and production work.

This is a tall order and one for which there are no clear pathways. The good news is that the U.S. has the world's best science and technological universities, laboratories, and innovation hubs in the world. It also has a well-developed set of venture capital and local banking systems needed to finance and nurture technology transfer and entrepreneurship. The challenge lies in mobilizing these resources to work together on a shared national mission to create high-quality, sustainable jobs across the full spectrum of design, production, marketing, and distribution.

### **Diffuse "Knowledge-Based Work Systems"**

A great deal has been learned in recent years about how to match investments in new technologies and other inventions with complementary work systems that help generate the full returns on these investments. These are often referred to as knowledge-based or high-performance work systems. Their defining features include adequate investment in training and skill development, work practices that allow workers to put their knowledge to work in solving problems and improving operations, and coordination among occupational and professional groups and managers (Appelbaum, Hoffer-Gittell and Leana, 2008). These work systems, if tailored to fit the specific features of different industries and occupations, are the modern means for generating the high productivity and service quality needed to support high wages.

The challenge is to get more firms to adopt them. Since the practices needed to achieve high productivity vary by industry, sharing information about them would be another useful function for the type of sector-specific initiatives suggested above. The Alfred P. Sloan Foundation had considerable success in generating and disseminating research on these work systems and other performance-enhancing strategies through the industry, academic, and labor study centers it created in recent years.

### **Encourage a Greater Use of "Shared Capitalism"**

Likewise, a great deal has been learned in recent years about how to translate and reinforce investments and new work systems into compensation plans that share the gains generated in ways that restore a relationship between pay and productivity. These involve use of broad-based incentive compensation systems that directly link employee earnings to actual firm performance: employee ownership, profit sharing, and broad-based stock options. Such broad-based equity and profit sharing would give employees access to the capital-related earnings of their companies just as senior executives already have such access. These broad-based pay systems are already used by some of the country's leading firms, including Wegmans Food Markets Inc., one of the nation's top grocery chains; and technology giants Cisco Systems Inc. and Google Inc.

Beyond consideration of workers' incomes, broad-based compensation helps firm economic performance. More than 100 studies that compare firms with and without broad-based incentive systems and/or compare firms before and after they introduce such systems, find that broad-based incentive compensation systems are generally associated with higher economic performance for firms and better labor-market outcomes for workers, particularly when implemented with human-resource management complementary policies that engage workers' knowledge, skills, and motivation to improve operations and enhance performance.<sup>27</sup> Workers in such systems generally have higher job security and receive such pay on top of their regular pay and benefits, along the lines of efficiency wage or gift exchange theories of wages, which mitigates concerns about risk.

While the private benefits lead many firms and workers to adopt these systems, there are also potential public benefits including reduced economic inequality and increased employment stability that can justify public policies. For example, current tax law restricts deductibility of pension plans only to plans that are broad-based. A similar principle could be applied to incentive compensation system so that firms that compensate executives with stock or profit sharing would have to extend such compensation practices more broadly among employees.<sup>28</sup>

In an economy where U.S. labor is increasingly competing with both technology and foreign workers, broadened access to capital income can help decrease inequality and reverse wage stagnation for regular workers. The idea is not meant to displace the norm that fixed wages should be fairly tied to productivity, but it does offer one mechanism to do this in light of the fact that a fairly coordinated system of "shared capitalism" with grants of stock and stock options and profit and gain sharing has been coherently implemented for the top executives of the corporate sector.

### **Build on Evidence from "Transformed" Labor-Management Relationships**

Four sets of evidence reviewed above indicate that creating and sustaining a new social compact will require a new labor management relations system.

- First, recall that it was union pressure and collective bargaining that generated and then helped sustain the wage-productivity norms that led to the post World War II social compact. The implication: worker advocacy and bargaining power and/or threat of union organizing will be needed to jumpstart and sustain a new Social Compact.

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<sup>27</sup> Kruse, Freeman, and Blasi, 2010

<sup>28</sup> Freeman, Blasi and Kruse are preparing a policy initiative based on this idea.

- Second, efforts to return to the arms-length labor management relations of the past will not generate the productivity and service quality levels needed to fund and sustain wage improvements. Adherence to those practices were part of the reason for increased managerial opposition to unions and to the growth of domestic non-union and international high-wage high-productivity competition.
- Third, alternative, so-called “transformed” models of labor management relations that encourage flexible and coordinated workplace practices, bargaining that incorporates various forms of “shared capitalism” wage practices discussed above ; and business strategies that focus on innovation, growth, productivity, and service quality have demonstrated their ability to compete at levels comparable to the most advanced non-union firms.
- Fourth, diffusion of these transformed models will require fundamental reforms and modernization of labor law and related policies.<sup>29</sup>

There is little or no short-term prospect for reforming and updating labor law through Congressional action, given the longstanding and continuing political stalemate on this issue. The Department of Labor could, however, take a more active approach to encouraging and disseminating information on state of the art labor management practices again through use of sectoral councils. Studies of labor-management partnerships in a variety of industries are available that could be used to support sectoral-specific reform initiatives.<sup>30</sup>

### **Adopt New Enforcement Models**

One necessary but far from sufficient requirement for setting and maintaining a floor on wages for hourly workers, and especially for low-wage hourly workers, is that federal and state wage and hour laws are enforced vigorously and as uniformly as possible. Recent studies have shown there are widespread violations of wage and hour laws ranging from failure to pay minimum wages, overtime, required meal and rest breaks, and misclassification of employees as independent contractors. One recent study estimated these types of violations have the effect of lowering wages of affected workers by 15 percent.<sup>31</sup>

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<sup>29</sup> For evidence on the effects of transformed labor management relations see See Kochan, Katz, and McKersie, 1986; Black and Lynch, 1997; Cutcher-Gershenfeld and Kochan, and Appelbaum, Hoffer-Gittell, and Leana, 2008. For evidence on the need for labor law reform see Ferguson, 2009, Freeman, 2011, and Kochan, 2011.

<sup>30</sup> For a recent review of these studies see Kochan, Eaton, McKerie, and Adler, 2009.

<sup>31</sup> See Bernhardt et al, 2009.

Others have documented widespread misclassification of employees as either managers or independent contractors.<sup>32</sup> Many of these managers perform what is largely employee work, which means that they should be reclassified as employees and compensated at straight time and overtime pay rates rather than at fixed salaries. Many so-called independent contractors provide services only to the one firm with which they have a contract, are managed by that firm in ways that are very similar if not identical to the ways in which the firm's employees are managed, and are not permitted to provide services to any other firm, which means that they should be (re)classified as employees and compensated via straight time and overtime pay rates and fringe benefits (such as health care and retirement plans).

It is also clear that the standard enforcement model that relies on either individual worker complaints or workplace inspections followed by fines and litigation are not sufficient means for achieving comprehensive or uniform enforcement. Increasingly, federal and state agencies are using more leverage and/or partnership based enforcement strategies. Some of these leverage the role of unions and/or community organizations and even industry associations to achieve more widespread enforcement. Others use the "hot-cargo" clause in the Fair Labor Standards Act and identify key firms in supply chains that can hold others accountable for meeting their legal responsibilities. Others rely on large-scale class-action law suits such as those that ultimately generated settlements against Wal-Mart of more than \$750 million.

While the threat of large and visible class-action law suits such as this may serve as a deterrent to illegal behavior, they are difficult to organize, expensive to litigate, and slow in reaching a resolution. Efforts to make greater use of negotiations, arbitration, and other alternative dispute-resolution methods would both strengthen the deterrent effect and improve the efficiency of reaching a resolution (Lewin, 2011).

These are all necessary elements in a broader strategy for enforcing the floor on wages and eliminating the penalty law-abiding firms now experience because of competition from non-complying firms.

Federal, state, and local governments also indirectly influence wages and other conditions of employment of a large portion of the private-sector workforce through their procurement and contracting processes. The Obama Administration has recognized the federal government's influence by issuing several executive orders, e.g., repealing the ban on Project Labor Agreements and announcing its intent to enforce high-standard employment practices among government contractors. In an earlier era this approach led to significant organizational enforcement and upgrading of equal employment opportunity practices in large firms (Leonard,

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<sup>32</sup> See Levine and Lewin, 2006; Lewin, 2011.

1984; Dobbins, 2009). An equally proactive effort along these lines would likely have a similar effect on both enforcing and providing an impetus to gradually improving wages.

### **Special Attention to Low-Wage Jobs/Labor Markets**

There is no silver bullet for improving wages of the lowest-paying jobs in the economy. Many of the measures outlined above — stronger and new approaches to enforcement of minimum wage and employment standards, restoring the ability of workers to gain access to unions and collective bargaining, stronger and expanding public-private investments in education and training, etc.— are necessary conditions for upgrading low wage jobs. Moreover, the past several decades have witnessed significant growth in the number and range of community groups and labor market intermediaries such as worker centers that advocate for and support low-wage workers.

These groups and institutions can both help leverage the enforcement efforts of government agencies and serve as partners with employers in improving the labor market readiness, skills, and mobility of workers competing for these jobs. Ultimately, however, these efforts will need to be complemented by gradually but steadily raising the floor on family incomes through increases in state and federal minimum wages, community living-wage ordinances, and/or increases in the Earned Income Tax Credit.

### **Needed: A National Dialogue**

The specific recommendations for action suggested above are not likely to be adopted unless there first is a widespread acknowledgement and discussion of the problem. A national discussion of wage and income norms has not occurred in this country since at least the 1960s when wage and price guideposts were introduced in an effort to control inflation. Today, the discussion is needed not to temper wage increases for average workers but to once again establish the principle that average wages should move in rough tandem with growth in productivity and that wages at the top of the occupational and income distribution should be expected to grow at something like the same rates as those of average workers. Without a broader national debate and expressed sentiment favoring these simple principles, commitment to embark on the policy, institutional, and organizational reforms needed to implement them will be lacking.

Given that the increased power of finance as an industry and in elevating shareholder influence in corporate affairs was a key source of the breakdown in the prior social contract, ways of rebalancing power and holding firms accountable for a broader set of outcomes has to be part of this debate.

The President could signal the need to continue discussion and tracking of compensation trends by instructing the Council of Economic Advisors to include in its annual report analysis of productivity, wage, and benefit trends for all levels of the income distribution. Moreover, the effects of the compensation rules included in the recent financial industry reforms should be monitored and reported and compensation trends in this industry should be compared to trends in other industries and the overall economy.

### **Conclusions**

The last Social Compact was built on a foundation of the New Deal labor and employment legislation, given life and sustained by a combination of economic growth, worker- and union-bargaining power, government policies and enforcement actions, and organizational practices that reinforced wage-productivity wage norms. It will take a similar systemic set of public and private actions to lay the foundation for a new Social Compact suited to the contemporary economy and workforce and to sustain it for the years needed to make up for the past 30 years of wage stagnation. We believe the ideas suggested here are each grounded in sufficient empirical evidence to be part of a systemic strategy and propose them as starting points for a national dialogue over how to once again get the economy working for the majority of workers and their families.



## References

Abdulkadiroğlu, Atila, Joshua Angrist, Susan Dynarski, Thomas Kane and Parag Pathak, "Accountability and Flexibility in Public Schools: Evidence from Boston's Charters and Pilots" *Quarterly Journal of Economics*, forthcoming 2011.

Appelbaum, Eileen, Jody Hoffer Gittel, and Carrie Leana. 2008. "High Performance Work Practices and Economic Recovery," [www.lerablog.org](http://www.lerablog.org).

Autor, David (2010a), "U.S. Labor Market Challenges over the Longer Term," Working Paper, Department of Economics, MIT, October 5.

Autor, David (2010b), *The Polarization of Job Opportunities in the U.S. Labor Market: Implications for Employment and Earnings*, Washington D.C., The Center for American Progress and The Hamilton Project of the Brookings Institution, 2010.

Autor, David, Frank Levy, and Richard J. Murnane (2003), "The Skill Content of Recent Technological Change: An Empirical Exploration," *Quarterly Journal of Economics*, Vol.118 (4), 1279-1333.

Autor, David, David Dorn and Gordon H. Hanson, (February 2011) "The China Syndrome: Local Labor Market Effects of Import Competition in the U.S., working paper, Department of Economics, MIT.

Bailey Martha J. and Susan M. Dynarski, "Growing Inequality in Post-Secondary Education," mimeograph, Department of Economics, University of Michigan, 2010.

Barley, Stephen. 2010. "Building an Institutional Field to Corral a Government: A Case to set an Agenda for Organization Studies," *Organization Studies*, 31, 777-805.

Batt, Rosemary and Eileen Appelbaum. 2010. "Globalization, New Financial Actors, and Institutional Change: Reflections on the Legacy of LEST." Paper presented at the Colloquium: Travail, Emploi et Compétence dans la Mondialisation, LEST, Université de la Méditerranée, May 27-28.

Bernhardt, Annette, Martina Morriss, Mark S. Handwork, and Marc Scott (2001). *Divergent Paths: Economic Mobility in the New Labor Market*. New York: Russell Sage.

Bernhardt, Annette, Ruth Milkman, Nik Theodore, Douglas Heckathorn, Mirabai Auer, James DeFilippis, Ana Luz González, Victor Narro Jason Perelshteyn, Diana Polson, Michael Spiller. 2009. *Broken Laws, Unprotected Workers: Violations of Labor and Employment Laws in America's Cities*.

Black, Sandra E. and Lisa M. Lynch. 2001. "How To Compete: The Impact Of Workplace Practices

And Information Technology On Productivity," *The Review of Economics and Statistics*. 83(3), 434-445.

Boyd, Donald, Susanna Loeb, James Wyckoff, Hamilton Lankford, Jonah Rockoff, 2007, "The Narrowing Gap in New York City Teacher Qualifications and its Implications for Student Achievement in High-Poverty Schools," The Urban Institute, September.

Blair, Margaret, 2010 "Financial Innovation and the Distribution of Wealth and Income," Working Paper, Vanderbilt University School of Law, 2010.

Buchmann, Claudia and Thomas A. DiPrete. 2006. "The Growing Female Advantage in College Completion: The Role of Parental Resources and Academic Achievement." *American Sociological Review* 71:515-41.

Cutcher-Gershenfeld, Joel, and Thomas Kochan. 2004. "Taking Stock: Collective Bargaining at the Turn of the Century," *Industrial and Labor Relations Review*, 58, 1, 3-26.

Davis, Gerald F. 2009. *Managed by the Markets: How Finance Re-shaped America*. New York: Oxford University Press.

DiNardo J, Fortin N.M., Lemieux T (1996) "Labor market institutions and the distribution of wages, 1973–1992: a semiparametric approach." *Econometrica*, 64, 2, 1001–1046.

Dew-Becker, Ian and Robert J. Gordon. (2005) "Where did the productivity growth go? Inflation dynamics and the distribution of income." *Brookings Papers Economic Activity*, (2), 67–127.

Dobbin, Frank. 2009. *Inventing Equal Opportunity*. Princeton: Princeton University Press.

Ferguson, John Paul (2008). "The Eyes of the Needles: A Sequential Model of Union Organizing Drives, 1999-2004." *Industrial and Labor Relations Review*, 62, 1, 3-21.

Hacker, Jacob S. and Paul Pierson (2010), *Winner-Take-All Politics*, Simon and Schuster.

Heckman, James J. and Paul A. LaFontaine, ( 2010). "The American High School Graduation Rate: Trends and Levels," *The Review of Economics and Statistics*, MIT Press, vol. 92(2), 244-262.

Foulkes, Fred. 1980. *Personnel Practices of Large Non-union Firms*. Englewood Cliffs: Prentice Hall.

Freeman, Richard B. (2011). "What Can We Learn from NLRA to Create Labor Law for the 21<sup>st</sup> Century?" *ABA Journal on Labor and Employment Law*, 26, 2, forthcoming.

Jacoby, Sanford. 2005. *The Embedded Corporation: Corporate Governance and Human Resource Management in Japan and the United States*, Princeton: Princeton University Press.

Jacoby, Sanford. 2008. "Finance and Labor: Perspectives on Risk, Inequality, and Democracy," *Comparative Labor Law & Policy* 30(17):17-65.

Jacoby, Sanford. 2009. "Finance and Labor: Perspectives on Risk, Inequality, and Democracy" in Clair Brown, Barry Eichengreen, and Michael Reich, eds., *Labor in the Era of Globalization*. Cambridge: Cambridge University Press.

Kochan, Thomas A., Harry C. Katz, and Robert B. McKersie, (1986) *The Transformation of American Industrial Relations*. New York: Basic Books.

Kochan, Thomas A. (2011). "Rethinking and Reframing U.S. Policy on Worker Voice and Representation," *ABA Journal of Labor and Employment Law*, 26, 2, *forthcoming*.

Kochan, Thomas A., Adrienne Eaton, Robert B. McKersie, and Paul Adler. (2009). *Healing Together: The Kaiser Permanente Labor Management Partnership*. Ithaca: Cornell University/ILR Press.

Kosman, Josh. 2009. *The Buyout of America: How Private Equity Will Cause the Next Great Credit Crisis*. New York: Penguin Group.

Kruse, Douglas, Richard Freeman, and Joseph Blasi (eds.), *Shared Capitalism at Work: Employee Ownership, Profit and Gain Sharing, and Broad-based Stock Options*, (Chicago: University of Chicago Press, 2010).

Lawrence, R. Z. and M. J. Slaughter (1993). "Trade and U.S. Wages: Giant Sucking Sound or Small Hiccup?" *Brookings Papers on Economic Activity*, No. 2, pp. 161-210.

Lazonick, William. 2009. *Sustainable Prosperity in the New Economy*. Kalamazoo, Mich.: W.E. Upjohn Institute.

Leonard, Jonathan. 1984. "Employment and Occupational Advance under Affirmative Action," *Review of Economics and Statistics*, 66, 377-85.

Lee D.S. (1999). "Wage inequality in the United States during the 1980s: rising dispersion or falling minimum wage," *Quarterly Journal of Economics*, 114, 3, 977–1023.

Lemeiux, Thomas. 2008. "The Changing Nature of Wage Inequality," *Journal of Population Economics*, 21, 21-48.

Levine, David I. and David Lewin, 2006. "The New 'Managerial Misclassification' Challenge to Old Wage and Hour Law; Or, What is Managerial Work." In D. Lewin, *Contemporary Issues in*

*Employment Relations*. Champaign, Ill.: Labor and Employment Relations Association, pp. 189-222.

Levy, Frank and Richard J. Murnane, *The New Division of Labor: How Computers are Creating the Next Job Market*, Princeton University Press, 2004.

Levy, Frank and Peter Temin, (2009) "Institutions and Wages in Post-World War II America," Chapter 1 in Brown, et. al., eds *Labor in the Era of Globalization*, Cambridge University Press.

Lewin, David. 2011. "Resolving Employment Disputes Through the Courts: Recent Evidence from Managerial Misclassification and Independent Contractor vs. Employee Status Litigation." Paper presented to the 63<sup>rd</sup> annual meeting, Labor and Employment Relations Association, Denver, Colo., January).

Lichtenstein, Nelson. (1995). *The Most Dangerous Man in Detroit*. New York: Basic Books.

Luce, Edward (2010) "The Crisis of Middle Class America" *Financial Times*, July 30, 2010.

<http://www.ft.com/cms/s/2/1a8a5cb2-9ab2-11df-87e6-00144feab49a.html>.

Mills, D. Quinn and G. Bruce Friesen. 1996. *Broken Promises: An Unconventional View of What Went Wrong at IBM*. Boston: Harvard Business School Press.

Mitchell, Daniel J. P. (1985? --paper on wage norms and concessions—

National Marriage Project (2010), *When Marriage Disappears: Marriage in America 2010*, Institute of American Values, University of Virginia.

Oreopoulos, Philip, Till Von Wachter, and Andrew Heisz (under revision) "The Short- and Long-Term Career Effects of Graduating in a Recession: Hysteresis and Heterogeneity in the Market for College Graduates."

Palley, Thomas. 2007. "Financialization: What It Is and Why It Matters." Levy Economics Institute. Working Paper No. 525.

Palley, Thomas I. 2009. *America's Exhausted Paradigm: Macroeconomic Causes of the Financial Crisis and Great Recession*, Washington, D.C.: New America Foundation, June 2009, p. 4.

[www.newamerica.net/files/nafmigration/Thomas\\_Palley\\_Americas\\_Exhausted\\_Paradigm.pdf](http://www.newamerica.net/files/nafmigration/Thomas_Palley_Americas_Exhausted_Paradigm.pdf), accessed 4-11-10

Philippon, Thomas (2007), "Why has the U.S. Financial Sector Grown so Much? The Role of Corporate Finance." NBER Working paper 13405.

Piketty, Thomas and Emmanuel Saez, "Income Inequality in the United States, 1913-1998" *Quarterly Journal of Economics*, 118(1), 2003, 1-39.

Taylor, George. (1948). *Government Regulation of Industrial Relations*. New York: Holt.

Useem, Michael. *Investor Capitalism: How Money Managers are Changing the Face of Corporate America*. New York: Basic Books, 1996.

Von Wachter, Till, Jae Song, and Joyce Manchester (2007). "Long-Term Earnings Losses due to Job Separation During the 1982 Recession: An Analysis Using Longitudinal Administrative Data from 1974 to 2004." Department of Economics, Columbia U., Discussion Paper No. 0708-16.

Weil, David (2010). "Fissured Employment," Working paper, Boston University, November 24, 2010.

Western, Bruce and Jack Rosenfeld, (October 2010) "Unions, Norms, and the Rise in American Wage Inequality," working paper, Department of Sociology, Harvard University.

White, Theodore H. "The Danger from Japan." *New York Times Sunday Magazine*, July 28, 1985.